

A NEW SPECIES OF *TRIGONOSPERMUM* (ASTERACEAE) FROM  
NORTHEASTERN MEXICO

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ABSTRACT

A new species of *Trigonospermum*, *T. hintoniorum* B.L. Turner, is described from southern Nuevo León and closely adjacent Tamaulipas. It is similar to *T. annum* McVaugh & Laskowski, but more so to the recently described *T. stevensii* Sundberg & Stuessey from Nicaragua, differing from both in quantitative details of foliage, corollas, and achenes.

KEY WORDS: Asteraceae, *Trigonospermum*, México

Routine identification of collections from northeastern México has revealed the following novelty.

**TRIGONOSPERMUM HINTONIORUM** B.L. Turner, *sp. nov.* TYPE: MEXICO. Tamaulipas: Mpio. Hidalgo, road between Caballos and Potreritos, in mixed forest, 1250 m, 22 Sep 1994, *Hinton et al.* 24879 (HOLOTYPE: TEX!).

*Trigonospermo annuo* McVaugh & Laskowski similis sed differt foliis majoribus (plerumque 8-16 cm latis vs. 2-8 cm latis), flosculis radii fuscatis majoribusque (ligulis in siccitate aurantiacis, 5-9 mm longis vs. luteis vel lutescentibus, 1.5-4.5 mm longis), flosculis disci numerosioribus (15-40 vs. 8-13), antheris longioribus (ca. 1.5 mm longis vs. 0.5-1.3 mm longis), et bracteis interioribus involucri pubescentibus (vs. glabris).

Erect annual herbs to 1 m high. Mid to lower stems fistulose, 3-6 mm across, moderately pubescent with both glandular and nonglandular hairs, the

latter ca. 0.5 mm long, the former ca. 0.3 mm long. Midstem leaves mostly 12-30 cm long, 8-16 cm wide, sparsely appressed-pilose above and below; petioles 3-8 cm long, tapered upon by the blades; blades broadly ovate to elliptical-ovate, 3-nervate from below, the margins irregularly serrate. Heads few to numerous, arranged in rather open corymbose panicles, the ultimate peduncles mostly 1-3 cm long. Involucres broadly campanulate, 3-4 mm high, 6-8 mm wide (pressed), the outer herbaceous bracts pubescent, subequal in two series, the inner bracts membranous with ciliate margins, the faces sparsely pubescent. Ray florets 3, conspicuous; ligules 5-9 mm long, 3-lobed, the lobes mostly 2-4 mm long, 1.5-2.5 mm wide. Disk florets 15-40; corollas glabrous to sparsely pubescent on the lobes. Anthers ca. 1.5 mm long. Achenes more or less 3-sided, black, striate, glabrous, ca. 4 mm long.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Nuevo León: Mpio. Zaragoza, Cierro Viejo, 2000 m, *Hinton et al.* 23419 (TEX); 1685 m, *Hinton et al.* 23476 (TEX); 1990 m, *Hinton et al.* 23478 (TEX) [all of the foregoing collected on 22 Sep 1993]; 1955 m, *Hinton et al.* 23499 [collected on 23 Sep 1993]. Tamaulipas: Mpio. Guemes, El Chihue, 2000 m, 10 Nov 1994, *Hinton et al.* 25098 (TEX).

*Trigonospermum hintoniorum* is obviously closely related to *T. annum* but is a more robust plant with much larger floral features, as noted in the above Latin diagnosis. The latter species is widespread throughout most of México, but is not known from the northeastern region (Nuevo León and Tamaulipas); it does occur in the state of San Luis Potosí where it has been reported by McVaugh & Laskowski (1972) in the vicinity of Cd. San Luis Potosí and subsequently collected by the Hintons (Mpio. "Sn N Tolentino", Picacho, 1940 m, 20 Nov 1990, *Hinton et al.* 20870 [TEX]).

*Trigonospermum hintoniorum* might be compared with the recently described *T. stevensii* Sundberg & Stuessy from Nicaragua (Ann. Missouri Bot. Gard. 77:418-420. 1990.). When initially described (as a reviewer of the paper), I took *T. stevensii* to be a large-headed populational form of *T. annum*, which it well might be. With the discovery of *T. hintoniorum*, however, which is much closer to the "descriptive parameters" of *T. stevensii* than to *T. annum*, I am reluctantly obliged to confess that perhaps two large-headed taxa have evolved out of the *T. annum* complex: *T. stevensii* in Nicaragua; *T. hintoniorum* in northeastern México. Alternatively, one might hypothesize that *T. hintoniorum* is but a disjunct element of *T. stevensii*, the former differing from the latter by its somewhat larger rays (mostly 5-9 mm long vs. 4.5-7.0 mm long), larger anthers (ca. 1.5 mm long, vs. 1.1-1.3 mm long), and most notably by its larger achenes (ca. 4 mm long vs. 2.5-3.2 mm long). This can be summarized in the following couplet:

1. Ligules of ray corollas 1.5-4.0 mm long; disk florets 1-13 per head; anthers

- 0.5-0.7 mm long. .... *T. annuum*
1. Ligules of ray corollas 4.5-9.0 mm long; disk florets 15-40 per head; anthers 1.1-1.5 mm long. .... (2)
2. Achenes 2.5-3.2 mm long; anthers 1.1-1.3 mm long; ligules mostly 4.5-7.0 mm long; Nicaragua. .... *T. stevensii*
2. Achenes 3.9-4.1 mm long; anthers ca. 1.5-mm long; ligules mostly 5-9 mm long; Nuevo León and Tamaulipas, México. .. *T. hintoniolum*

It is a pleasure to name the present taxon for the G.B. Hinton family, who have assembled all of the collections known to me (six in number, cited in the above).

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#### LITERATURE CITED

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